IN THE CLAIMS:

Please cancel claims 19 and 37.

Please amend claims 20-26 and 38-44 as follows:

D1

20. (Twice Amended) An *in vitro* method of inducing somatic differentiation of undifferentiated, pluripotent human embryonic stem cells, wherein said undifferentiated, pluripotent human embryonic stem cells are prepared by a process comprising:

obtaining an *in vitro* fertilised human embryo and growing said embryo to a blastocyst stage of development;

removing inner cells mass (ICM) cells from said embryo;

culturing said ICM cells under conditions which do not induce extraembryonic differentiation and cell death and promote proliferation of undifferentiated stem cells; and

recovering stem cells;

said method comprising growing said stem cells under culture conditions that induce somatic differentiation, wherein said culture conditions comprise prolonged cultivation of the undifferentiated stem cells on a differentiation inducing fibroblast feeder layer to induce a differentiated somatic lineage or multiple differentiated somatic lineages, said conditions do not permit continued stem cell renewal but do not kill stem cells or induce their unidirectional differentiation into extraembryonic lineages.

D2

21. (Amended) The method according to claim 20 wherein the differentiation inducing fibroblast feeder layer is a mouse and/or human fibroblast feeder layer.

D3

22. (Twice Amended) The method according to claim 20 or 21 wherein said fibroblast feeder layer comprises embryonic fibroblasts.

D3 concld

23. (Twice Amended) The method according to claim 20 or 21 wherein the fibroblasts are tested for their ability to promote embryonic stem cell growth and to limit extraembryonic differentiation.

24. (Twice Amended) The method according to claim 20 or 21 wherein the fibroblasts are prepared and tested for their ability to allow somatic differentiation of embryonic stem cells.

25. (Twice Amended) The method according to claim 20 or 21 wherein said culture conditions comprise cultivating the cells for prolonged periods and/or at high density in the presence of a differentiation inducing fibroblast feeder layer to induce somatic differentiation.

26. (Twice Amended) A method for the isolation of committed progenitor cells from a culture of differentiated cells, said method comprising:

preparing a culture of differentiated cells according to claim 20 or 21; and

isolating committed progenitor cells from the culture.

D4

38. (Amended) An *in vitro* method of inducing somatic differentiation of undifferentiated, pluripotent human embryonic stem cells, wherein said undifferentiated, pluripotent human embryonic stem cells are prepared by a process comprising:

obtaining an *in vitro* fertilised human embryo and growing the embryo to a blastocyst stage of development;

removing inner cell mass (ICM) cells from the embryo;

culturing ICM cells on a fibroblast feeder layer to obtain proliferation of undifferentiated stem cells; and

recovering the stem cells from the feeder layer;

said method comprising growing the stem cells under culture conditions that induce somatic differentiation, wherein said culture conditions comprise prolonged cultivation of the undifferentiated stem cells on a differentiation inducing fibroblast feeder layer to induce a differentiated somatic lineage or multiple differentiated somatic lineages, said conditions do

not permit continued stem cell renewal but do not kill stem cells or induce their unidirectional differentiation into extraembryonic lineages.

39. (Amended) The method according to claim 38 wherein said differentiation inducing fibroblast feeder layer is at least one of a mouse fibroblast feeder layer or human fibroblast feeder layer.

40. (Amended) The method according to claim 38 or 39 wherein said fibroblast feeder layer comprises embryonic fibroblasts.

41. (Amended) The method according to claim 38 or 39 wherein the fibroblasts are tested for their ability to promote embryonic stem cell growth and to limit extraembryonic differentiation.

42. (Amended) The method according to claim 38 or 39 wherein the embryonic fibroblasts are prepared and tested for their ability to allow somatic differentiation of embryonic stem cells.

43. (Amended) The method according to claim 38 or 39 wherein said culture conditions comprise cultivating the cells for prolonged periods and/or at high density in the presence of a differentiation inducing fibroblast feeder layer to induce somatic differentiation.

44. (Amended) A method for the isolation of committed progenitor cells from a culture of differentiated cells, said method comprising:

preparing a culture of differentiated cells according to claim 38 or 39; and

isolating committed progenitor cells from the culture.

REMARKS

Claims 1-26 and 29-46 are pending in the present application. Claims 1-18, 29-36 and 45-46 are withdrawn from consideration. Claims 19-26 and 37-44 are under consideration in the Final Action dated May 22, 2002. Claims 19-26 and 37-44 have been